

THE USE OF THE ELECTRONIC TEACHING MANUAL ASA DIGITAL RESOURCE IN HIGHER EDUCATION

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Abstract. *The article examines the problem of formation and development of information and communication competencies of a future teacher in the conditions of transformation of the educational process. The relevance of the research is due to the tasks of digitalization of education and the focus on the development of all types of digital activities of students. The article attempts to describe the ways of formation of digital competence among future teachers on the example of the author's electronic resources of the teacher.*

Keywords: *communicative competence, information competence, digitalization, digitalization of education, digital educational environment, digital competencies, electronic educational resource.*

Introduction. In recent years, fundamental structural and substantive reforms have been implemented in the Republic of Uzbekistan, affecting all levels and components of the education system, aimed at ensuring its compliance with international standards. A developed legal support for the reform of the education system has been created, which has identified as a priority the growth of investments in capital and the development of digital technologies, and then in the implementation of the large-scale program "Digital Uzbekistan - 2030" [1] for a comprehensive transformation of the economy and increasing the country's competitiveness at the international level. The need to switch to the use of digital educational technologies is caused primarily by the transformation of economic and social interactions of society into a digital environment. The Law of the Republic of Uzbekistan "On Education" No. ZRU-637 of September 9, 2020 defines the concept of "education" as a systematic process aimed at providing students with deep theoretical knowledge, skills and practical skills, as well as the formation of general and professional knowledge, skills and abilities, the development of abilities. In the conditions of digitalization, the professional competence of the teacher is also changing. Therefore, educational institutions should pay considerable attention to the formation of professional competence among future specialists since their student years.

The ability to work and integrate digital, cloud technologies, modern methods and models in educational processes is the main task in becoming a specialist.

Relevance of the study. It is conditioned by the tasks of digitalization of education and the focus on the development of all types of digital activities of future teachers of the Russian language and literature, as well as the improvement of digital literacy of the future teacher.

In the works of modern researchers, it is noted that mixed technologies and e-learning as a new pedagogical environment require new skills from teachers-digital literacy. In this regard, the educational environment of an educational organization can be supplemented with subject electronic educational resources that are created by teachers according to the author's idea within the framework of the taught subject.

Materials and Methods. In the theory of pedagogy, there are different points of view regarding the concept of "competence". Thus, according to V.N. Vvedensky, the competence of a teacher integrates cognitive, operational and axiological aspects. However, we adhere to the opinion of A.V. Khutorsky, who considers the theory of competence within the framework of a conceptual system of personality-oriented learning, when the actions of subjects with objects and

actions with themselves differ, that is, intra-subjectively [2]. By the compactness of a teacher, we understand a dynamically developing process that responds sensitively to modern challenges of society. In this regard, the most urgent problem in the system of vocational education is the process of forming the digital competence of a teacher as an integral component of the professional competence of a modern teacher.

The research of A.A. Vasilyeva, N.V. Gremina, T.D. Lavrinenko, V.P. Ignatieva, N.P. Tabachuk and other scientists is devoted to the topic of digital competencies of teachers [3]. In the works of modern researchers, it is noted that e-learning as a new pedagogical environment requires new skills from teachers - digital competencies.

Professional competence is characterized by the unity of theoretical and practical readiness to carry out pedagogical activity and implies the possession of generalized characteristics of the teacher concerning his professional activity and independent of personal qualities – competencies [4]. One of the main competencies in the modern educational field is the possession of digital technologies.

It should be noted that many foreign authors address the issues of expanding the composition of the teacher's competencies, changes in the professional readiness of the teacher of the future, while most of the authors note that against the background of basic professional competencies, those that meet promising requirements will appear in the characteristics of the teacher of the future [5].

Discussion and results. In education, textbooks, textbooks, problem books, anthologies are the information core of the educational process. The main advantage of the book, of course, is its autonomy. There is no need to have any technical devices for use; reading books is a familiar and comfortable activity for a person, not associated with severe eye fatigue. The construction (apparatus) of the textbook has been worked out for years and effectively contributes to the development of the content. Today, the requirements for printed publications for educational purposes are changing in tune with changes in education. Pedagogical publications define the following functions of a modern educational book: informational (a source of mandatory information for assimilation); transformational (organization of content in accordance with current educational standards); systematizing; motivational; orientation of students to certain ways of cognitive activity; development of cognitive capabilities.

Currently, the most effective innovative form of activation of educational activity is the development and implementation of electronic educational resources in the educational process, which make it possible to maximize the personal potential of each student. Electronic educational resources (EOR) are scientific and pedagogical, educational and methodological materials presented in the form of electronic educational tools that implement the didactic capabilities of ICT (Robert I.V., Lavina T.A., Mironova L. I., etc.) [7]. The relevance of information and technical support in modern higher education based on e-learning technologies is becoming more obvious every year. In this regard, the use of electronic textbooks, electronic subject resources in the educational process is becoming increasingly relevant.

The main difference between electronic resources and traditional ones is often called fast, convenient (including remote) access to educational information and the possibility of using one information object simultaneously by a large number of users.

It should be noted that the role of electronic resources is particularly evident in the process of independent extracurricular work of students. In accordance with the new educational standards, the nature of independent work is changing significantly; it takes much more time in the total complexity of disciplines and educational modules. Educational goals are also being transformed: subject, knowledge goals fit into a wide range of vital and professionally important competencies

for a modern specialist. The process of self-development of knowledge, which form the basis for the formation of competencies, should be individualized and occur in new information conditions that reflect the flow of information processes in modern society and the area being mastered. This means that electronic content is needed that provides independent individual or group activities of students using modern information tools in accordance with a personally accepted professional development strategy. In this context, what matters is not the selection of mandatory or recommended sources of educational information for mastering, but providing the student with real freedom in choosing the path of knowledge in a wide educational environment [8].

We have developed educational resources, which, in addition to the main textbook in printed form, also includes an interactive electronic textbook that can be read on any media (smart phones, tablets, computers) and an electronic educational resource "Russian Folklore".

Russian Russian Oral folk Art printed textbook and electronic application developed on the basis of the Standard curriculum "Russian oral folk art" for the direction 60111700 – Russian in foreign language groups, approved by Tashkent State University named after Nizami from 30.08.2022, designed for classroom classes under the guidance of a teacher and for self-study.



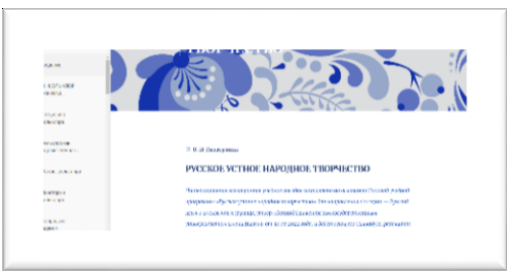



	<p>Textbook "Russian oral folk art"</p>	
	<p>Electronic interactive textbook "Russian oral folk art"</p>	
	<p>Electronic educational resource "Russian folklore"</p>	

Figure 1. A set of textbooks for the course "RUNT"

The printed textbook "Russian Oral Folk Art" (177 pages) consists of an introduction and 10 chapters, each chapter is supported by control questions and tasks, the manual includes diagrams and tables, a glossary on the subject and the literature used.

An electronic interactive manual has been created for this tutorial on the iSpring platform. The electronic textbook can be considered as a means of forming information and communication and digital competencies of future teachers.

The electronic interactive textbook has a number of advantages over the printed edition. Each chapter and paragraph has applications that you can watch, listen to, download. There are also control questions and tasks: tests, interactive exercises and simulators, virtual excursions.

In the 2022-2023 academic year, an electronic interactive textbook was tested and introduced into the educational process. This resource was recommended to first-year students.

Initially, we conducted a survey among students about their attitude to the digitalization of education. As part of the study, 120 first-year students were offered a questionnaire with the questions "What is digitalization in general?", "What, in your opinion, are the advantages and disadvantages of digitalization in the education system?". Respondents were asked to rate their attitude to digitalization on a 5-point scale from "digitalization is absolutely necessary" (5 points) and "the attitude is categorically negative" (0 points). As a result of the analysis of the questionnaires, it was found that 39% of respondents have a positive attitude towards digitalization, 21%-rather positively, but 12.5% of respondents noted a negative attitude. Thus, digitalization is supported by 60% of the surveyed students, see Figure 2.

STUDENTS' ATTITUDE TO DIGITALIZATION

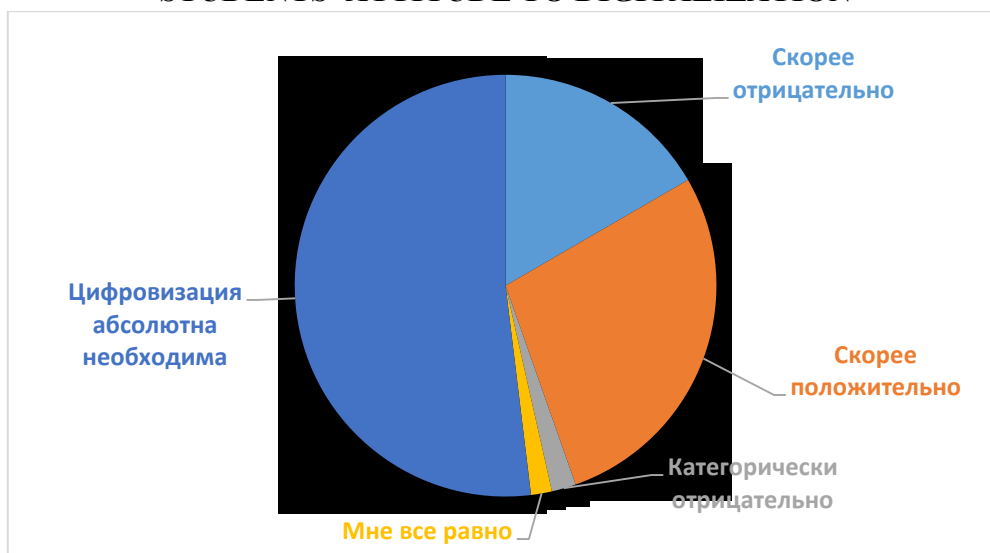


Figure 2. Students' attitude to digitalization

The analysis revealed that students put different content into the concept of "digitalization". Thus, students do not perceive digitalization as a global process, and consider it in separate manifestations when their personal interests are affected (transfer to distance learning, the need to participate in online conferences, communicate with electronic resources and perform tasks online). Others note that digitalization is an irreversible process that has covered all spheres of life and education, but also their future work, so they clearly understand the need for digitalization, as it brings them closer to their future profession. They note that as a result of the introduction of web technologies into the educational process, not only ways of transmitting information are laid, but it changes the entire structure of the educational process, the approach to learning, the relationship of the teacher with students is changing. This makes education accessible to students from all over the world. Digitalization affects the material and technical support, the organization of the educational process as a whole, the assessment system, and the distribution of the teaching load. Therefore, they believe that digitalization will radically change education, personality psychology, the communication process, the labor market, and therefore they see more dangers and global changes that digitalization will entail.

The attitude of students to electronic educational resources is generally positive. Russian Folklore interactive electronic textbook "Russian oral folk art" and electronic resource "Russian Folklore" were used by students at each lesson and in independent work.

To work with this electronic textbook in the classroom, it is necessary to provide the student with a personal computer or mobile devices and open the electronic textbook itself directly by the link, also this manual can be used for independent work of the student at anytime, anywhere.

The manual consists of 8 sections:

- general information;
- theoretical block, which consists of 34 parts;
- the practical section, which consists of part of the tasks and questions for self-examination, and the second part includes tests that must be passed before the student proceeds to the implementation of practical work;
- glossary;
- literature;
- applications include self-test questions.

The electronic interactive tutorial contains:

- Video Files -11;
- Tables and diagrams -10;
- Interactive exercises-10;
- Practical tasks - 15;
- Tests-25;
- Ppt as a download file - 30;
- * Hyperlinks-35;
- Self-control questions -50;

Russian Life Museum, Virtual Ethnographic Museum "Semenkovo", Virtual Museum of Russian Mythology). • Virtual excursions -3 (Museum of Russian Everyday Life, Virtual Ethnographic Museum "Semenkovo", Virtual Museum of Russian Mythology).

Thus, the forms of work with the electronic manual and electronic resources:

Explanation of the new material – 65%;

Independent work of a student in class with an electronic manual -85%;

Testing tasks using an electronic manual- 63%;

Independent work on recommended questions of practical tasks – 39%;

The use of the electronic manual "RUNT" and the electronic resource "Russian folklore" in the preparation of homework -46%.

To organize a differentiated approach to teaching using an electronic manual, tasks of different levels, questions, exercises, practical tasks and links to view additional material are used. The means of the textbook in electronic form that help to build an individual trajectory of students: the ability to open pages anywhere, a convenient menu of the manual, images and tables, interactive tasks of different levels of complexity, students can perform them individually at any time, simulators, additional material on the links, see Figure 3.

The elements of the manual in electronic form contribute to the concentration and productivity of attention on the task: reading additional material, test tasks, interactive tasks, downloading presentations on the topic from the manual. The objects, services of the electronic manual, encourage students to perform additional tasks, active links of the manual are aimed at the attention of students: virtual tours of the museum exposition "Russian life", "Virtual tour of the ethnographic museum "Semenkovo", and the virtual museum of "Slavic Mythology".

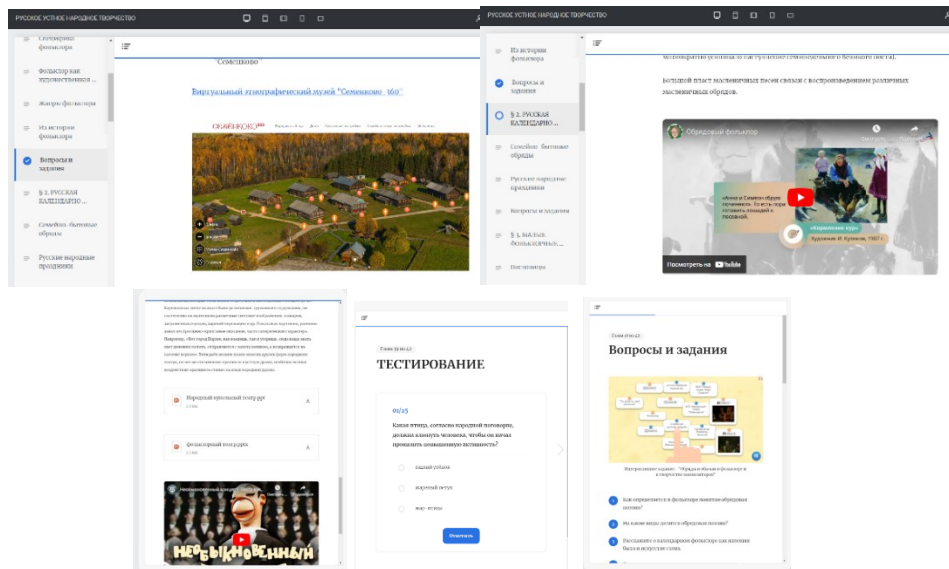


Figure 3. Means of the electronic manual

Thus, the electronic form of the textbook as a means of individualizing learning gives visual – a gallery of pictures, video clips, text information; audio – audio accompaniment, video clips; kinesthetics – interactive tasks, virtual excursions, keyboard work.

Electronic educational resources on the subject of "RUNT" are easy to use, can be read on any digital media and are an addition to traditional forms of learning, it is designed not only to preserve all the advantages of an ordinary book (textbook), but also to fully use modern information technologies, multimedia capabilities.

We conducted a survey among students about the use of electronic manuals.

A survey of students on the effectiveness of the use of the manual showed the following results:

Increased interest in the study of the subject – 92%;

Individual mode of study of the subject -88%;

Getting hints, help- 72%;

Visibility - 50%;

Systematization of knowledge 53%;

It is comfortable and interesting to work with the resource -58%;

Students also noted that classes have become more interesting and productive; that information has become better absorbed; they like virtual excursions (clicking on links).

Thus, an e-book (manual) is an interactive textbook with illustrations, videos, interactive tasks and online tests, links. It works on any device and automatically adjusts to the size of the screen.

Conclusions. We believe that electronic manuals are of great practical importance. With their help, you can not only report factual information provided with illustrative material, but also visually demonstrate certain processes that cannot be shown using standard teaching methods. Various video materials, virtual excursions provide a visual demonstration of educational information.

When working with an electronic textbook, not only the reproductive activity of students takes place, but also abstract-logical, this helps to better understand and realize, assimilate the program material. It is important that the student has the opportunity to use this electronic resource both at lectures, in practical work, and independently, this contributes to the holistic image of the subject being studied in the educational process.

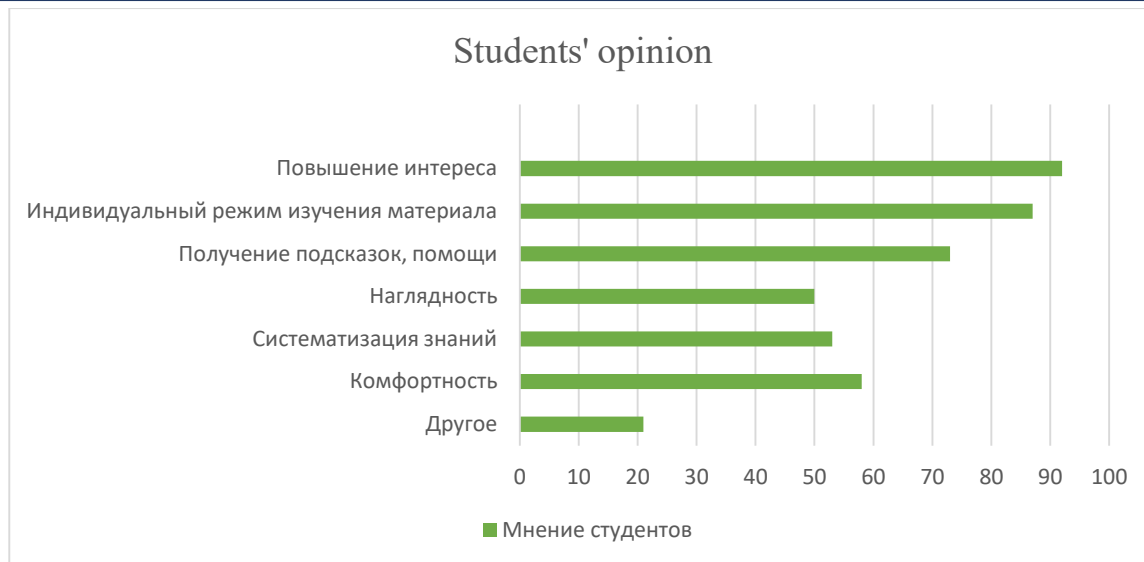


Figure 4. Students' opinion

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